

FETC 2019 Notes from Wanda Terral (@wterral)

Table of Contents:

Blueprint for Technology in Education Summit (BTES) - Opening Session	1
BTES - Advancing a Global Blueprint for Technology in Education	3
BTES - Putting the Learning Before the Technology	7
BTES - Making the Right Decisions Around Data System and Technology Tools	8
BTES - What Does Tech-Savvy Educational Leadership Look Like?	10
Bringing Physical Computing into Any Classroom	12
Digital Instruction: To Infinity and Beyond!	12
Future of EdTech Information Technology Track Orientation	14

Blueprint for Technology in Education Summit (BTES) - [Opening Session](#)

The Global Landscape of Educational Technology — Trends and Successes

The Blueprint for Technology in Education Summit @ FETC 2019

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Stay up-to-date on the Blueprint:
<http://edtech.co/BlueprintForm>

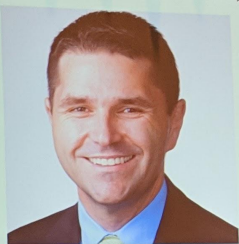
International EdTech
internationaledtech.com

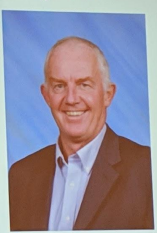
The Blueprint for Technology in Education Summit

- **The Global Landscape of Educational Technology – Trends and Successes**
(Presentation)
8:00 – 9:00 am
- **Advancing a Global Blueprint for Technology in Education**
(Presentation)
9:15 – 10:45 am
- **Put the Learning Before the Technology**
(Panel)
11:00 – 12:15 pm
- **Making the Right Decisions Around Data Systems and Technology Tools**
(Panel)
1:15 – 2:30 pm
- **What Does Tech-Savvy Educational Leadership Look Like?**
(Panel)
2:45 – 4:00 pm
- **Crafting Your Action Plan: Leveraging Technology in Our Schools**
(Workshop)
4:15 – 6:00 pm

International EdTech

Introductions – Matt Harris, Ed.D. and Vincent Jansen


Owner and Chief Consultant
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Edtech Professional Learning is: Collaborative, Personalized, Social, Tool Independent, Ongoing, Actionable



"Learning Festival" instead of PD Days



Late start school days / Early dismissal school days

Pushes for: Innovation (innovative practices), Computational Thinking (often framed as coding which is incorrect), Design Thinking, Digital Citizenship



Computational thinking - a process of thinking.



Design Tech - focus design on problems. See UK curriculum



Digital Citizenship - everything non-academic; not an add-on - be embedded.



Digital Literacy is wider than Digital Citizenship

Information Technology and Data: Going to the cloud, integrity of network, GDPR, BYOD, Data Privacy, Communications / Collaborations, Disaster Preparedness, Data Ecosystems (closed)



Ransomware more widespread



Cybersecurity - weakest link is the human not the wires,



GDPR - <https://eugdpr.org>



Considerations - Define information / data; Ecosystems - Open EMIS - <https://www.openemis.org>; Assessments (summative and formative); Planning; Asking Key Questions (big and small)



COPPA will be changing based on GDPR

EdTech Across the Globe - Success stories

- China - Management of Learning (200 million students). Teachers have to get like 70 hours a year of continuing learning; IoT - feeds personalized learning
- Singapore - Design Thinking - Students (across the board on all grade levels) are developing products to solve problems; 7 year old design chopsticks that sauce the food; **students can solve global problems by solving local problems**
- India - Use for mobile for learning (they have more phones than people); platform agnostic;
- Middle East - AR/VR for Learning;
- Europe - Blending learning esp around language development - <https://pamojaeducation.com>
- Africa - Digital Access - School in the Cloud - <https://www.theschoolinthecloud.org>
- Australia / New Zealand - Computer Science - Built into the national curriculum
- Latin America - Social media and large scale PLN

- Canada - Computational thinking - Standards based grading; more formative assessment focus than summative; problem solving

Trends Worldwide - Venture capitalism outside the US; mergers and acquisitions (FlipGrid; Haiku; etc); ecosystems and partnerships; digital literacies (users but also the districts themselves); STEM / STEAM (tending to focus on subjects rather than the learning); making and tinkering (challenges with testing); data privacy and protection; **investment in products but not learning** (accompanying PD is not there); lack of strategic planning and growth (more reactive); global data standards

BTES - [Advancing a Global Blueprint for Technology in Education](#)

MindRocket Media Group - <https://www.mindrocketmediagroup.com>

Sign up for updates on the Blueprint - [Link to Google Form](#)

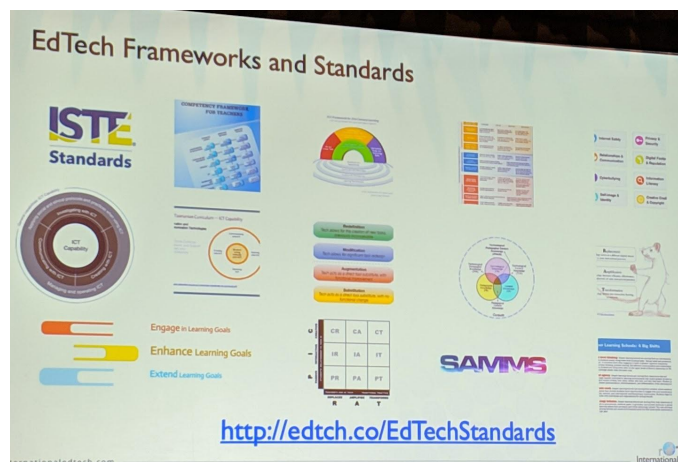
- Matt Harris - <https://twitter.com/MattHarrisEdD>
- Vince Jansen - <https://twitter.com/vjansen>

Goal is not selling. It is building a Community of Practice!

Why a Blueprint? - A gap in the Edtech field between the IT and reality in the classroom and the leadership and the related to data. Blueprint is going to help fill those gaps - with student learning at the center of each discussion. **Meetings should have an empty chair in the room to represent the student.**

The ISTE standards are the end-point - the goal. Is the person you're training going to be with you in the future. Not always.

Table Discussion - <http://mattharrisedd.com/2018/11/09/educational-technology-standards-frameworks> - For a framework implementation to be successful it has to start with the culture of the school.



What is the GAP?

What's the GAP?

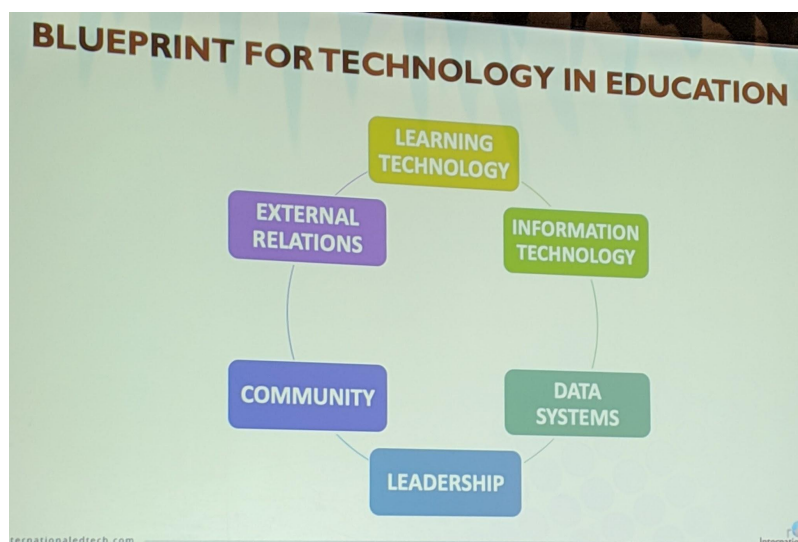
- Existing EdTech Frameworks and Resources:
 - Are outcome based
 - Give little insight into practice or process
 - Are rarely measurable
 - Only focus on academics
 - Rely on assumptions
- Assumptions
 - Individuals are consistent in the process
 - Individuals are knowledgeable about technical details
 - Individuals understand the upstream and downstream implications of their actions
 - Individuals know good practice
 - Individuals are the center of the system
 - The school is in North America

Don't just service the devices, support the learning

Driving questions - 1) Can we create a roadmap for all technology in a school/district? 2) How can this be valuable to schools/districts/edtech conferences?

A blueprint is a plan. It doesn't build the house. It helps those who are working on the house to know what each other is up to.

We are in a constant state of evolution - different in every district. We won't ever be THERE.



SLIDE DECKS WILL BE LINKED ON THE FETC HASHTAG (probably tomorrow)

Learning Technology - "The uses of technology for teaching and learning"

Learning Technology

"The uses of technology for teaching and learning."

- Teacher competencies
- Student learning outcomes
- Teaching practices
- Assessment models
- Planning and evaluation processes
- Professional development models
- Common tools

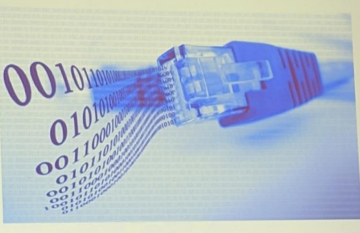


Information Technology - "The technology used for the operations of the organization"

Information Technology

"The technology used for the operations of the organization"

- Networks
- Servers
- Devices
- Users
- Access control
- Software and services
- Safety and security
- Privacy
- Backup and retention

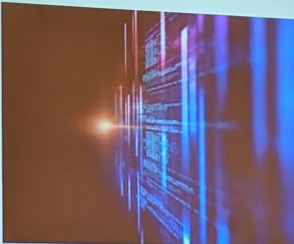


Data Systems - "The information, uses of information, and systems that house information in a school"

Data and Data Systems

"The information, uses of information, and systems that house information in a school"

- Data
- Data definitions
- Data uses
- Data systems
- Data ecology
- Data flow
- Data-based decision making



These three - not specific to technology but vital to the success!

Leadership - "The knowledge and actions needed to lead a school that utilizes technology academics and operations" (Staffing - goal should be one EdTech coach for every 500 students; Tech leadership **MUST** be sitting on top level district level meetings because it is a part of ALL decisions)

Leadership

"The knowledge and actions needed to lead a school that utilizes technology academics and operations"

- IT, EdTech, and data leadership competencies
- District, school, or sectional leadership knowledge
- Actions, processes, and procedures
- Staffing
- Evaluation and accountability
- Strategy and planning
- Budgeting



Community - "How stakeholders in the community use technology"

Community

"How stakeholders in the school community use technology"

- Community mapping
- Teachers
- Students
- Admin
- Governance
- Non-teaching staff
- Parents



External Relations - "The connections made outside of the school to support its use of technology" (Before choosing a vendor, important to see how it's being used in other schools / districts; managing the legal requirements is become a huge focus; **Solve world peace first and then change education - do the easy one first;**

External Relations

"The connections made outside of the school to support its uses of technology"

- Mapping external connections
- Vendor analysis
- Relationship management
- Supervision
- Negotiation
- Local authorities
- Legal requirements
- Managed services



Table Discussion on how these are in our schools / districts - 1) When talking with vendors, get more than a yes / no. Their YES may be different from our YES (ex. Do you offering rostering?) 2) Are districts actually reading all of the Terms of Service for online educational services? 3) Online services should get away from requiring certain ports to be open for web-based services to work.

START WITH THE WHY

- For every decision a school / district makes, you should know the answer to WHY.
- The WHY for the blueprint
 - Shared resourcing
 - Knowledge for stakeholders
 - Comprehensive map of the ecosystem of the school / district (**What is the OPD - Other Person's View**; too many places to go - too many logins)
 - Assessment and valuable strategic planning
 - Connections - internally and externally
 - Validation of EdTech Tools and Services
 - Define a common language for tech in education

THE HOW

BTES - Putting the Learning Before the Technology



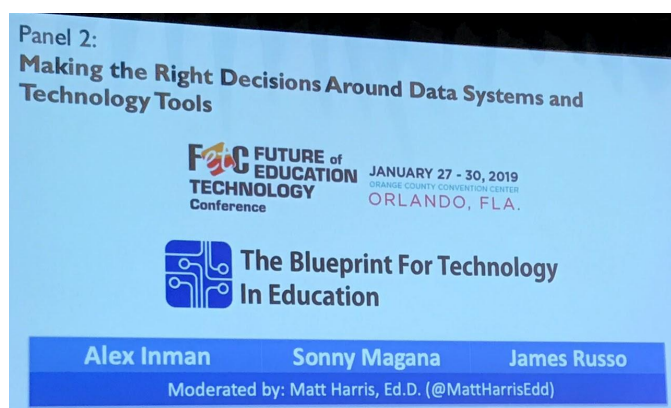
Takeaway phrases, thoughts, quotes:

- Technology may be the solution but what is the question?
- OCPS LaunchEd - <https://www.ocps.net/cms/One.aspx?portalId=54703&pageId=88567>
- Buying technology is easy; implementing is the challenge

- How do we measure the impact of technology on learning?
- Does technology help assessed subjects and, if so, how?
 - Can be a huge influencer with positive results but can also be a total waste of time (distractor)
 - Teach computational thinking WITHOUT a device. It's about the thinking!
 - Sketchnoting - Use to support the student's interest / thoughts / questions and if that happens THEN can move to the device to research
 - It depends on the teacher
- How does the teacher remain the center of the use of technology? Don't throw a device into the classroom and think magic happens. The teaching has to change (adjust instruction based on instant seamless feedback). The classroom management has to change. The learning changes. It's allowing the device to learning where it couldn't go before.
- Skills developed through the use of technology - digital literacy, digital citizenship, teacher confidence to bring in active lessons into the classroom...
- Shifting from content to competencies (with creativity and critical thinking)
- Moving from differentiation toward personalized learning - OCPS has one school using ELL with personalized learning playlists; other schools different focuses including having students develop a minimum number of items on a playlist. (Not sure what he means by "playlist")
- What does personalized learning really look like? Learning not driven by age but by ability.
- How do you know they have learned? What kind of questions are the student asking. Teach the skill not just the answer. Record a baseline and then measure metrics after the teaching / learning. Has their behavior changed (Not hailing a cab anymore; use an app to get a ride).
- Teachers are drowning with everything that's new all the time. Technology won't make a bad teacher into a good teacher. - Make access and use as easy as possible (SSO). Tech training must be embedded into the already existing PD. OCPS builds out a set of curriculum resources.
- The best way to learn is to do. The worst way to teach is to talk. (Johnnie Jiao)
- Teachers learn best from each other (not from taxi drivers) (Johnnie Jiao)
- The most important skill is adaptability.

The Framework for Learning Technology Support

BTES - [Making the Right Decisions Around Data System and Technology Tools](#)



T3 Framework - Sonny Magna

Students get Wired then Mired and then Tired when it comes to a technology. Missing a common language. Tech conversation must focus on goals related to achievement.

You even need technology to buy lunch now.

The ORG chart, roles must be defined for technology so that all tech decisions support teaching and learning. The challenge is dealing with other staff who don't have the knowledge to have the discussions.

Start with the end in mind - academic, social-emotional, citizen (the digital safety falls into citizen). Have leading indicators and check progress along the way; not just at the end.

Common purpose, common vision, common multi leveled pathway (hardware/software/infrastructure, students creating, telling story, etc...).

Everybody is an expert in a certain area. Finding staff who crossover in areas of expertise.

Best practices for designing the infrastructure - school culture matters and schools are different so each implementation of a soft rollout is different. KPIs should be school-specific.

Instead of sharing one success in a staff meeting, share one failure. Comfort for sharing your failures with your peers in comfortable way.

Service level agreement with the community - how long until you get a replacement machine. Up time expectation. Downtime related to devices and online services. Then the district may more likely fund the expectations OR lower the unrealistic expectations.

Ticketing system needs to evolve. Support with a knowledge base when tickets aren't fast enough.

Why is data such a big deal now? It's always been a big deal. Are we measuring what we value, or valuing what we measure. To get a rich enough picture of instructional moments, student voice must be represented. Summative test scores are one avenue but must also listen to students, teachers, parents to measure success.

Data analysis is a function of failing better.

Data doesn't answer questions. It helps to adjust the pathway of the journey.

You must have access to your data and it should be interoperable with other tools. API access should be full & free. Demand that. It is your data.

ETL (extract transform and load) systems. SIP (school interoperability framework) is an example.

What's the right data for the decisions we need to make? Assessment data, user accessibility data (usage data, who is using). If usage is low, do we need it or do we need to improve the implementation or training?

Feedback is a loop. Student-created feedback loop - Effort, progress, and how they feel about their effort and progress. Effect size 1.3 (huge). Unleash their unlimited learning potential.

Data scientists help make decisions of what data to collect. Ideally can program in pandas and python and R (outsource by connecting with local university - make the data anonymous for security).

Role of AI in education. Will it replace teachers?

Old CAI systems actually hurts instruction. Add a teacher and scaffolding, effectiveness rises slightly.

Argument is that newer AI will be responsive.

Surface learning is about 1/3 of learning. Deeper learning. Knowledge transfer. Humans are needed in all three areas.

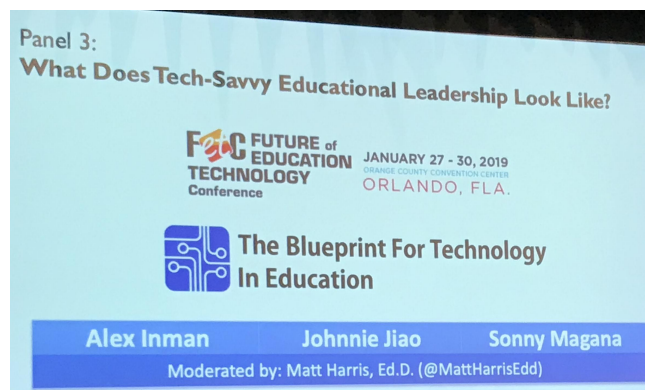
The biggest barrier to technology is the adults, not the students.

AI May help us do our jobs better (PowerPoint reading and reporting emotions of audience) and may result in us needing fewer people to do what we do.

How do you know it is time to bite the bullet and make a change? How system (like SIs) interacts with other parts of ecosystem. Have a justification for the change - defined, clear reason for change. Value added is part but experience for users as well.

Big V (five) - Volume of data, velocity of data, variety of types of data, veracity of the data, value of the data.

BTES - [What Does Tech-Savvy Educational Leadership Look Like?](#)



Models the use of technology (operate digitally, connected PIN), regular thinker of the role technology plays in solving your problems, be open to use of technology, diving deep into what the technology can help us learn about data.

T3 framework (1.6 effect) - strategies to focus on innovation not just digitization. Knows technology plays subordinate role to good teaching and learning. Translational (use tech for efficiency), transformational

(students creating, students teaching other students using technology), transcendent (inquiry design, social entrepreneurship, seeking to solve wicked problems). Tech-savvy is strong in all three areas.

Must be a good leader first of all. Must be a good learner, especially a good digital learner.

How do you know a leader is innovative?

- What is the predictive indicator for innovation. Not just a lot of ideas but do we have a culture that makes people feel they can bring new ideas to the table? Measure the number of ideas but also the number of failures too.

Grit - push past the naysayers. A belief we will get where they want to go. Build capacity from all members of organization. Knows that failure offers gifts. An expert is someone who has made all the failures in a narrow field (or some quote like it)

What if... Leads to innovation.

Parents don't want their children to be the guinea pigs for innovations. The leader should be able to say, here's what the research / evidence says... Innovation should lead to an overall betterment of the students. Leaders must be able to explain that and stand behind it.

When a teacher fails at an innovative idea, the leader should ask how it will be done better next time (not punish or fire them for the failure).

Tech skills needed -

- not a tech expert but willing to learn, can give encouragement to teachers to experiment

Doesn't have to be principal. Teacher-leader (evangelist tech leaders).

- Use technology for their own personal growth. Gives understanding of the learning experience from a learners viewpoint. Includes the emotions related to that process.
- Teachers should be doing small pilots of their own with soft rollouts >>> How are we helping teachers with this.
- Give students the autonomy to decide who to choose the tech or not. Literacies of the students go up when they have the chance to choose what tech to use, if any tech at all.
- Passion - not only get passion out of the students but out of their peers.
- Jigsaw method - learners teaching other learners (kids or adults).
- Teacher leadership should go beyond the classroom. More than a committee chair for those who have been around a lot. Put younger teachers in those leadership roles - this will keep innovation going.

PLN - one teacher - one lesson program, classroom20.com, MOOC, learning but also contributing. When a leader sets a culture of contribution rather than competition.

#cpchat, small groups of colleagues, can even be by phone or face to face.

Don't just sprinkle 21st century sprinkles on a 20th century donut.

It's hard to stay reliable and consistent when you're trying new things. - Alex Inman Remember to keep the eye on the prize, the long view.

Time for learning about technology for teachers.

- If it's valuable they will want to learn about it. (Eh)
- Merge the teaching of instruction with technology.
- Teach the tech using the blood borne pathogens; tech then how to apply the tech in a personal area (make videos of their family);

Support - give resources, give clear language of vision and bring it up often, give recognition (not financial necessarily), give teachers time (make the time, cover classes)

States say be innovative but states are still measuring the same things. Really they want innovation as it relates to test scores.

T3 learn same amount in half the time. How will you use that saved time to impact student achievement.

T3 Academy launching tomorrow.

Bringing Physical Computing into Any Classroom

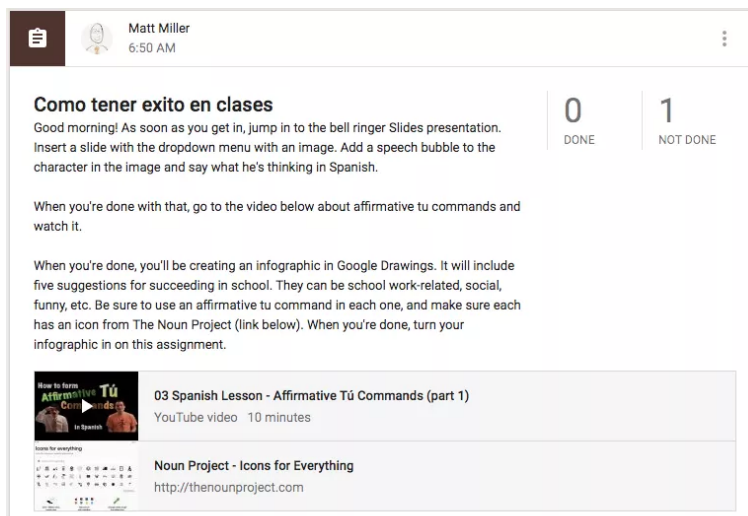
Photos - <https://photos.app.goo.gl/mju8W83Lbd5xoBRx9>

Facebook Post - <https://facebook.com/wterral/posts/2031725223529322>

Digital Instruction: To Infinity and Beyond!

<http://ditchthattextbook.com/infinity>

Minutes of instruction are valuable. Do NOT waste them. Put all instructions in your LMS (or Google Classroom). Put the responsibility back on the student.



Como tener éxito en clases

Good morning! As soon as you get in, jump in to the bell ringer Slides presentation. Insert a slide with the dropdown menu with an image. Add a speech bubble to the character in the image and say what he's thinking in Spanish.

When you're done with that, go to the video below about affirmative tú commands and watch it.

When you're done, you'll be creating an infographic in Google Drawings. It will include five suggestions for succeeding in school. They can be school work-related, social, funny, etc. Be sure to use an affirmative tú command in each one, and make sure each has an icon from The Noun Project (link below). When you're done, turn your infographic in on this assignment.

03 Spanish Lesson - Affirmative Tú Commands (part 1)
YouTube video 10 minutes

Noun Project - Icons for Everything
<http://thenounproject.com>

Hyperdocs - <https://hyperdocs.co/> & <https://docs.google.com/document/d/1twllhoRnWLbsxtESsMEW0xDkGVUVvvKDN7stbyt-5oo/template/preview>

	Engage To engage students at the beginning of a lesson, insert video, image, quote, or another inspirational hook in this box.
	Explore Curate a collection of resources (articles, videos, infographics, text excerpts, etc.) for students to explore a topic.
	Explain Use this section of the HyperDoc to explain the lesson objective through direct instruction using your favorite web tool, or gather students together to teach the content.
	Apply Create an assignment for students to apply what they learn by using web tools to create, collaborate, and/or connect beyond the classroom.
	Share Collect student work to provide feedback, and/or include a section for students to share work with an authentic audience.
	Reflect Include an opportunity for face-to-face or digital reflection to guide students along their learning progression and set new goals.
	Extend Add links to more activities and online resources to extend the learning.

Wakelet for curating - <https://wakelet.com>



How Wakelet works

Create a title and a description. Then, start adding items to your collection.

Add text, links, images, PDF files, tweets, and more. With the link option, you can add just about anything from the web to a Wakelet collection.

Let contributors add to your collections by giving them a link or inviting them via email.

When you're done, you can share your Wakelet collections with a link, QR code, through Google Classroom or by embedding it in a website.

Your Wakelet's title

A description goes next to show the purpose of the collection.

-  Add a text block (or lots of text blocks) so each student can contribute text.
-  Add image blocks with photos students find -- or take themselves.
-  Add links to make collections of web pages or to point to resources.
-  Add PDFs to your Wakelets that viewers can view and download.
-  Add social media posts in your collections. Great for schools/districts!



Future of EdTech Information Technology Track Orientation



Guest - Lenny Schad (former Houston ISD CIO) - Think in systems and organizational readiness. Not just your system but other systems in the district. All must be involved in successful implementations.

Digital Leadership - Eric Sheninger

International Center for Leadership in Education

Are the students learning > Can I be more efficient > Can I be more effective >

Pedagogy is the driver; technology is the accelerator. (quote by Michael Fullan)

- 1) Are the kids thinking (and moving up in Bloom's)
- 2) How are they applying their thinking?

Lifesaving Technologies for School Campuses - Kecia Ray

Verify demographic data in mid-year.

Alert to computer - comes up on every screen in a lockdown. Gives instructions. Instantly calls police.

<https://www.alertus.com/alertusproducts/desktop>

Shelter pods (Tulsa) - <http://shelterinplace.com/>